

# Peptides Sequences, Human, Mouse and Rat

## A.

```

      ::  **.:
IB2      :  IPSPSVEEPHKHRPTTLRL--TTLGAQDS
IB1      :  PGTGCGDTYRPKRPTTLNLFQVPRSQDT
c-Jun    :  GAYGYSNPKILKQSMTLNLADPVGNLKPH
ATF2     :  TNEDHLAVHKHKHEMTLKFGPARNDSVIV

```

## B.

```

      :  . .***** *      **:
L-IB2   :  EEPHKHRPTTLRL--TTLGAQDS
L-IB1   :  DTYRPKRPTTLNLFQVPRSQDT
          ° ° °

```

## C.

```

L-TAT    :  NH2- GRKKRRQRRR -COOH
L-TAT-IB1 :  NH2- GRKKRRQRRRPPDITYRPKRPTTLNLFQVPRSQDT -COOH
L-TAT-IB2 :  NH2- GRKKRRQRRRPPPEEPHKHRPTTLRLTTLGAQDS -COOH

D-TAT    :  NH2- RRRQRRKKRG -COOH
D-TAT-IB1 :  NH2- TDQSRPVQPFNLNLTTPRKPRYTDPFRRRQRRKKRG -COOH

```

Fig.1

# Generic Sequences, Human, Mouse and Rat

L-TAT-IB	: NH <sub>2</sub> -	XXXXXXXXXRRRQRRXXXXXXXXXXRPTTLXXXXXXXXXXQDS/TX	-COOH
D-TAT	: NH <sub>2</sub> -	XXXXXXXXXRRRQRRXXXXX	-COOH
D-TAT-IB	: NH <sub>2</sub> -	XT/SDQXXXXXXXXXLTLTPRXXXXXXXXXXXXXXXXRRRQRRKXXXXXXXXX	-COOH

Fig.2

# Effects of GFP-JBD<sub>23</sub> Construct on Pancreatic $\beta$ -Cell Apoptosis

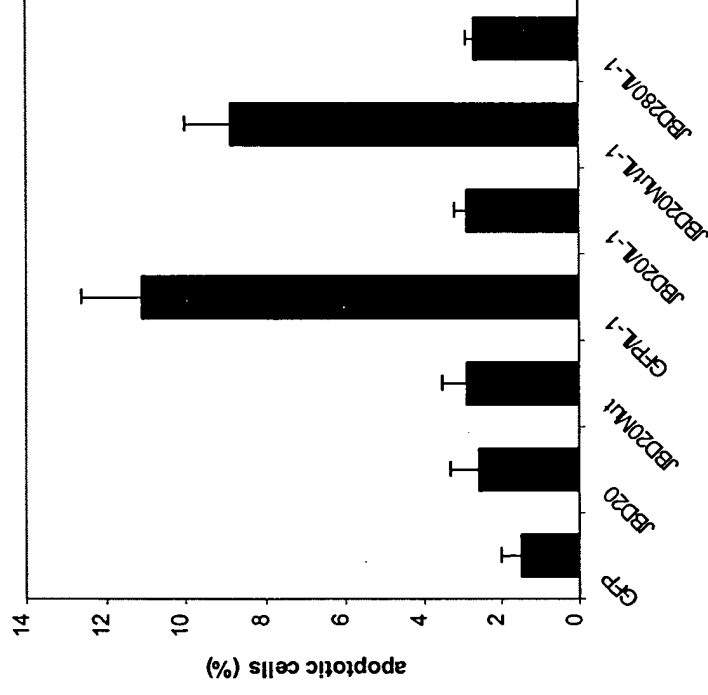
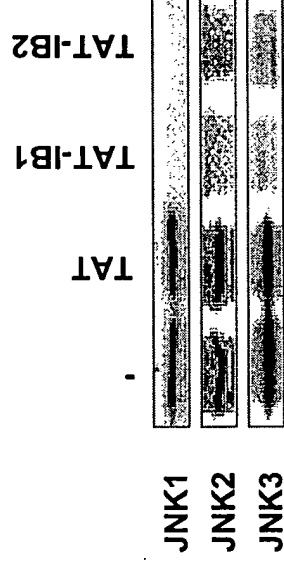


Fig. 3

## Effects of TAT-IB Peptides on JNK Mediated Phosphorylation



*Fig. 4a*

## Effects of TAT-IB Peptides on JNK Mediated Phosphorylation

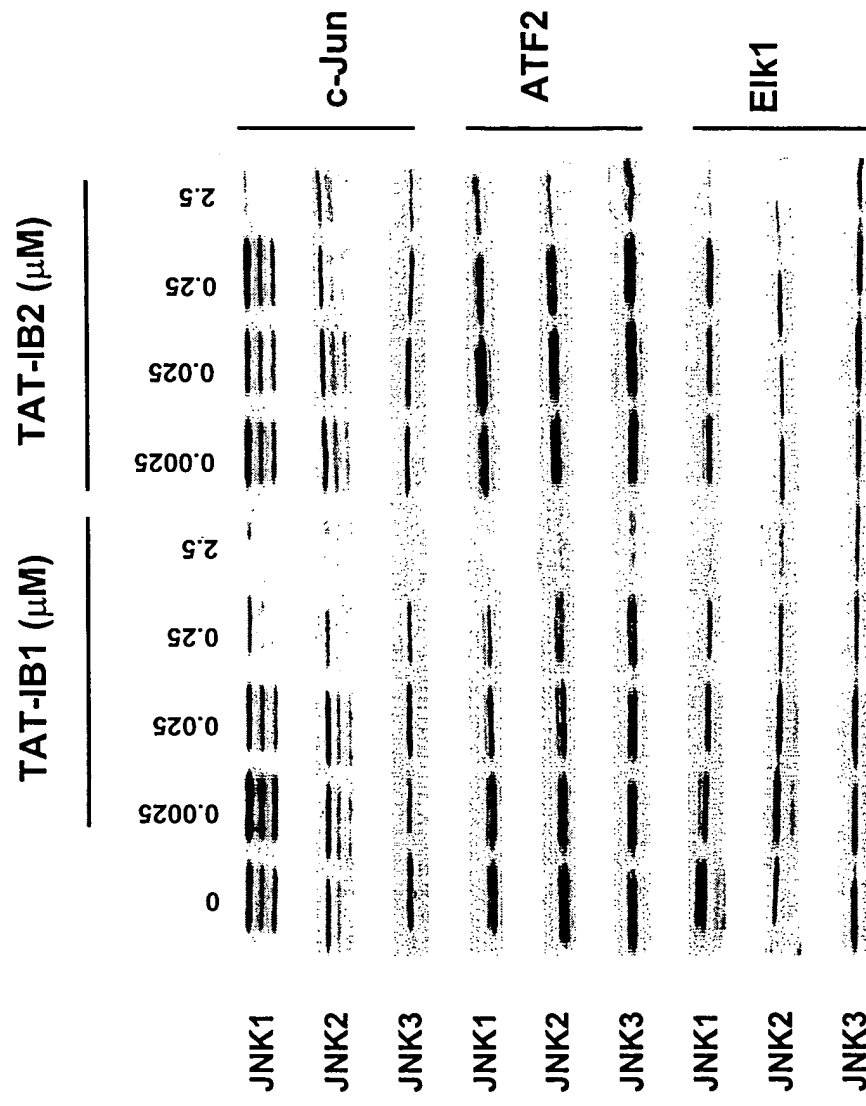
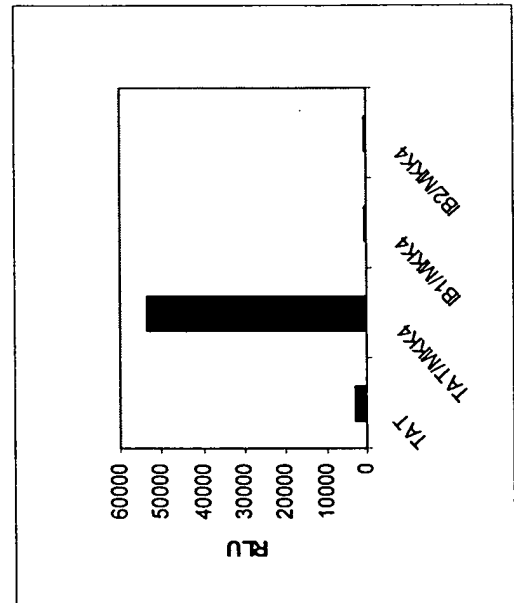
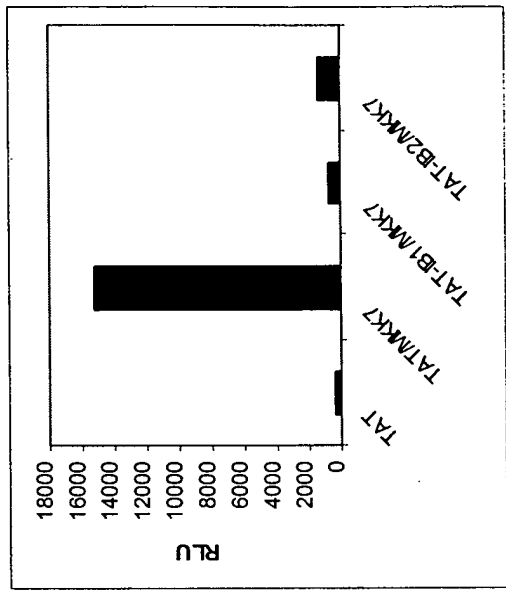


Fig. 4b

# L-TAT-IB Inhibition of Phosphorylation By Recombinant JNKs



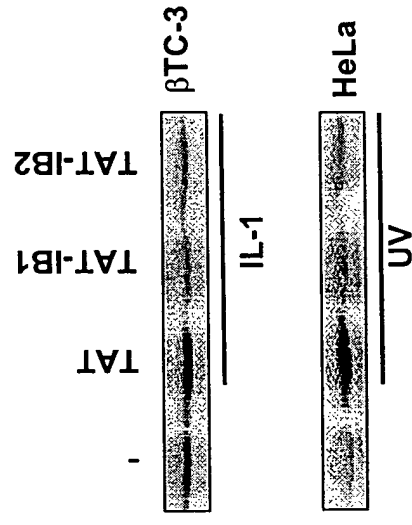
A.



B.

Fig. 5

## *In Vivo* Inhibition of c-Jun Phosphorylation by TAT-IB Peptides



*Fig. 6*

# Inhibition of IL-1 $\beta$ Induced Pancreatic $\beta$ -Cell Death by TAT-IB Peptides

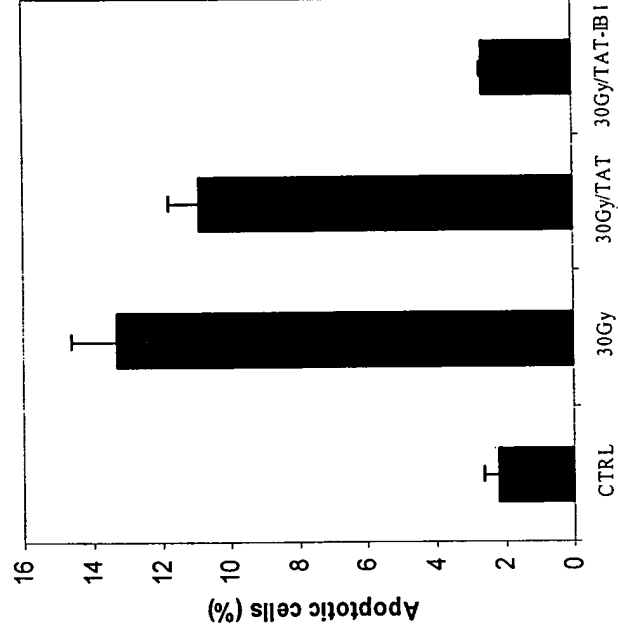


Fig. 7



# The D-TAT-IB1 peptide decreases IL-1-induced apoptosis in $\beta$ TC-3 cells

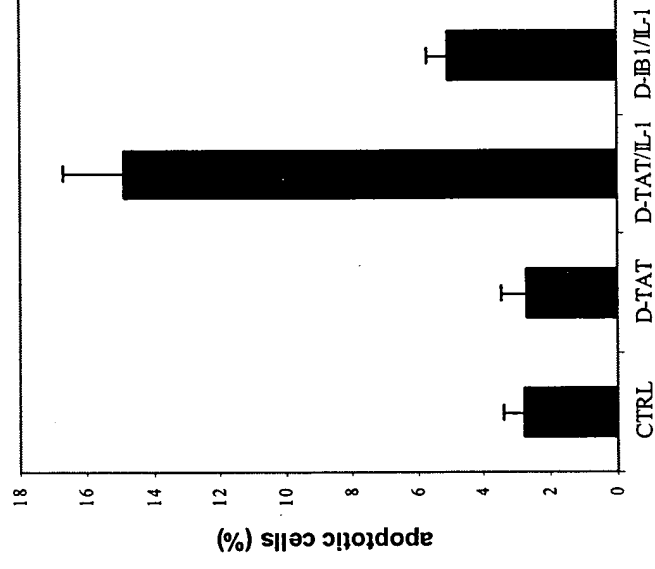
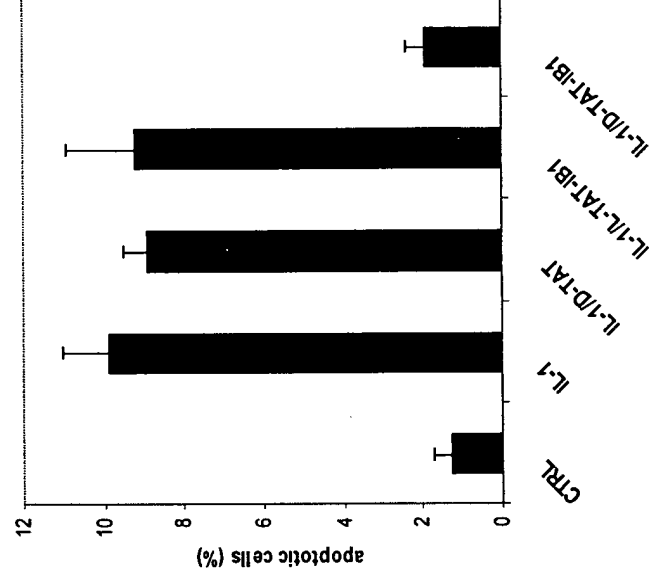


Fig. 8

# **The D-TAT-IB1 peptide confers long-term protection (15 days) against IL-1-induced apoptosis in $\beta$ TC-3 cells**



**Fig.9**

# L-TAT-IB1 and D-TAT-IB1 peptides prevent IR-induced apoptosis in a human colon cancer cell line

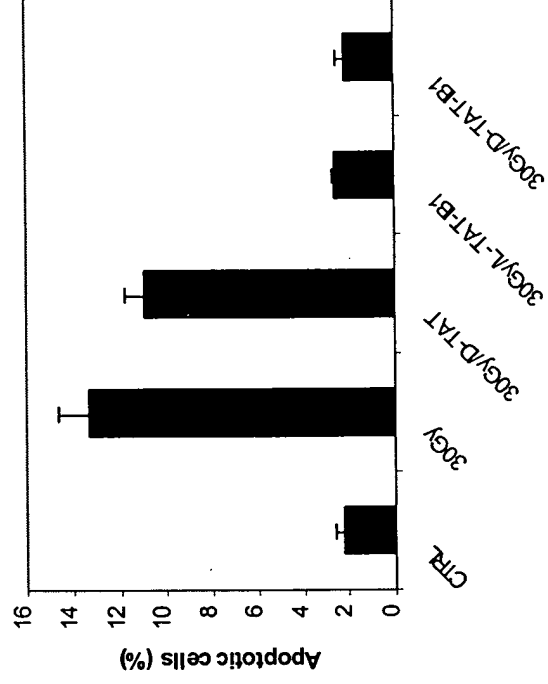


Fig.10

## Suppression of JNK Transcription Factor Phosphorylation by L-TAT-IB1 Peptides

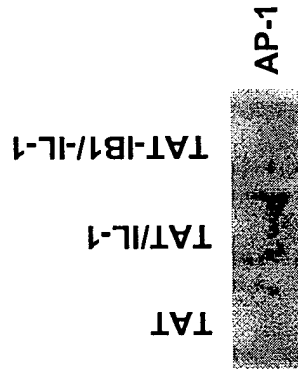
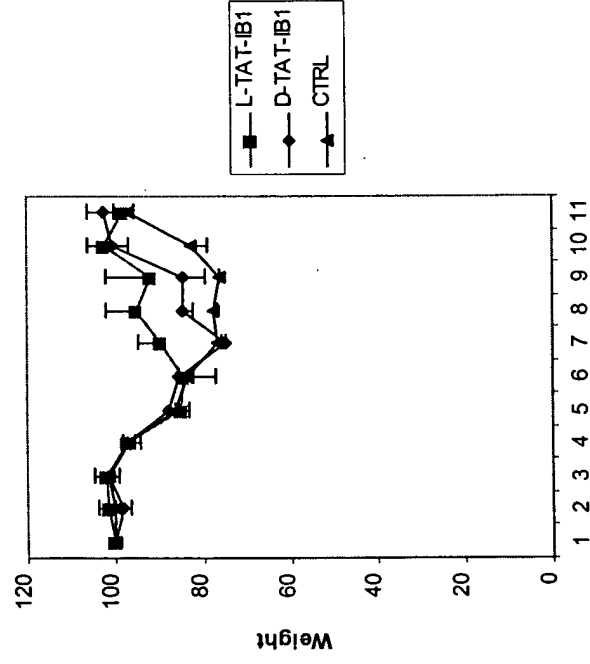
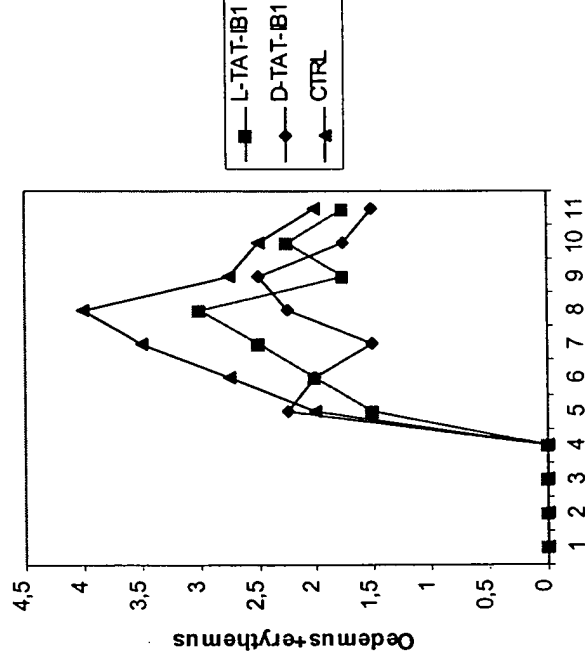


Fig. 11

# Radioprotection to Ionizing Radiation by TAT-IB1 Peptides



A.



B.

Fig. 12